Defense Information Infrastructure (DII)

Common Operating Environment (COE)

Version 3.0.1.0

Version Description Document
for the Kernel Patch 1

(HP-UX 10.20)

May 9, 1997

Prepared for:

Defense Information Systems Agency

Prepared by:

Inter-National Research Institute (INRI)
12200 Sunrise Valley Drive, Suite 300
Reston, Virginia 20191

Table of Contents

This page intentionally left blank.

NOTE: Courier font is used to indicate entries to be typed at the keyboard, operating system commands, file and directory names, and screen text. For example:

The file is located in the `DII_DEV` directory.

---

1. System Overview

The Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.1.0 Kernel Patch 1 (HP-UX 10.20) encompasses the following changes:

(1) Profile switching has been modified to allow icon launching and menu switching after a profile switch or merge. Reference the *DII COE Security Manager's Guide* for more information about accounts and profiles.

(2) The following icons were removed from the `Desktop_Tools` folder and the `Desktop_Apps` folder for security reasons:

`Desktop_Tools` **folder**	
Execute Command	The `Execute Command`(`ExecuteCmd`) action prompts for a command and then executes it on any files that are supplied as arguments.
Make	The `Make` action for no arguments prompts for a Makefile and target and then uses the UNIX `make` command to make it.
Shred File	The `Shred File` (`Rm`) action uses the `rm -i` command to remove files without placing them in the trash can. It prompts you with the name of each file and allows you to indicate if the file should be removed. *Files that have been shredded cannot be recovered*.
Text Editor (Vi)	The `Text Editor`(`Vi`) action runs the `vi` command in a terminal window and loads a data file if you supply one.
`Desktop_Apps` **folder**	
Create Action	The `Create Action`(`Dtcreate`) action runs the `Create Action` application. Use `Create Action` to create action and data type definitions for applications.
Text Editor	The `Text Editor`(`Dtpad`) action opens the specified file in a desktop text editor window.

NOTE: Both the `Desktop_Tools` and `Desktop_Apps` folders are available to all users.

---

(3) A link to the shared library (libXm.sl) was created on the kernel to allow applications to use libXm.sl instead of the static version.

2. Referenced Documents

The following documents are referenced in this Version Description Document (VDD):

C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.1 Security Manager's Guide (HP-UX 10.20 and Solaris 2.5.1)*, DII.31.HPSOL.SMG-1, Inter-National Research Institute (INRI), April 14, 1997

C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.1.0 Kernel Installation Guide (HP-UX 10.20)*, DII.3010.HP1020.IG-1, Inter-National Research Institute (INRI), April 14, 1997

C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.1.0 Kernel Patch 1 Installation Guide (HP-UX 10.20)*, DII.3010.HP1020.KernelP1.IG-1, Inter-National Research Institute (INRI), May 9, 1997

C *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.1.0 Version Description Document for the Kernel (HP-UX 10.20)*, DII.3010.HP1020.Kernel.VDD-1, Inter-National Research Institute (INRI), April 14, 1997.

3. Version Description

3.1 Inventory of Materials Released

C <u>Magnetic media</u>: Two 4mm DATs consisting of a relative tar of the DII COE Version 3.0.1.0 Kernel Patch 1 (HP-UX 10.20).

C <u>Soft-copy Documentation</u>: One 3.5" floppy diskette (WordPerfect 6.0 for Windows format) containing the *Defense Information Infrastructure (DII) Common Operating Environment (COE) Version 3.0.1.0 Version Description Document for the Kernel Patch 1 (HP-UX 10.20)*, Document Control No. *DII.3010.HP1020.KernelP1.VDD-1*, May 9, 1997.

C <u>Hard-copy Documentation</u>: Two hard copies of the aforementioned VDD.

3.2   Software Changes

Reference the following table for a list of DII COE Version 3.0.1.0 Kernel Patch 1 software changes (HP-UX 10.20). The software changes are listed in order of INRI Number.

DII COE Version 3.0.1.0 Kernel Patch 1 (HP-UX 10.20) Software Changes
Total Software Changes: [3]
INRI Number: RTO00001483 **Agency Number**:   None. **Short Description**: Launching of SSO icons failed after a profile switch in a System Administration-based account. **Long Description**: Launching of icons failed after a profile switch. For example, switch from the SA_Default to the SSO_Default profile; the SSO_Default icons will not execute. Note that the account has been assigned to the admin group and both AdminMgr and ProcessMgr are running. Security Administration profile icons cannot be launched from an account with a default System Administration profile.
INRI Number: RTO00001600 **Agency Number**:   None. **Short Description**: Several desktop icons pose a security risk and should be removed. **Long Description**: The following icons should be removed from the desktop because they pose a security risk. In the Desktop_Tools folder: Execute Command, Make, Shred File, and Text Editor (Vi). In the Desktop_Apps folder: Create Action and Text Editor.

INRI Number: RTO00001601
 	
Agency Number: None.
 	
Short Description:
Missing X11 library links need correction.
 	
Long Description:
A problem with an X11 shared library in the developer's environment results in a potentially large increase in the size of the resulting executable. A link to libXm.sl is missing, thereby forcing programs to pick up the static version instead of the shared version. The following corrections should be made:
 	
  /usr/lib/Motif1.2_R6/libXm.sl must be linked to /usr/lib/Motif1.2_R6/libXm.2
  /usr/lib/X11R6/libXm.sl must be linked to /usr/lib/Motif1.2_R6/libXm.2

4. Installation Instructions

This DII COE Version 3.0.1.0 Kernel Patch 1 (HP-UX 10.20) tape is a patch segment and must be installed after the HP-UX 10.20 Operating System and the DII COE Version 3.0.1.0 kernel have been installed. Reference the *DII COE Kernel Installation Guide (HP-UX 10.20)* for instructions on installing the HP-UX 10.20 Operating System and the DII COE kernel.

Install the Kernel Patch 1 segment using the COEInstaller. Reference the *DII COE Version 3.0.1.0 Kernel Patch 1 Installation Guide (HP-UX 10.20)* for instructions on installing the DII COE Version 3.0.1.0 Kernel Patch 1 segment.

5. Known Problems and Errors

This section contains DII COE Kernel Patch 1 known problems and errors and DII COE Kernel Patch 1 Commercial Off-the-Shelf (COTS) and Government Off-the-Shelf (GOTS) known problems and errors.

5.1   DII COE Kernel Patch 1 Known Problems and Errors

Reference the following table for a list of DII COE Version 3.0.1.0 Kernel Patch 1 known problems and errors (HP-UX 10.20). All known problems and errors, with the exception of RTO00001604, apply to DII COE Version 3.0.1.0 and are not specific to this patch. The known problems and errors are listed in order of INRI Number.

DII COE Version 3.0.1.0 Kernel Patch 1 (HP-UX 10.20) Known Problems and Errors
Total Software Changes: [5]
INRI Number: RTO00001324
Agency Number: None.
Short Description: Security Manager deletion of profiles does not delete the directory structure.
Long Description: When a profile (TESTER) was created using the DII_APPS > SSO_Default > Security Manager > Profiles > Add Profile option, the system correctly created the /h/USERS/local/Profile/TESTER directory. However, when the Delete Profile option was used, the directory structure remained. This problem occurs for both local and global profiles. NOTE: The profile did not appear in any other areas while trying to create a new account.

DII COE Version 3.0.1.0 Kernel Patch 1 (HP-UX 10.20) Known Problems and Errors

INRI Number: RTO00001603

Agency Number: None.

Short Description:
The version number displayed in the security banner does not support the display of Patch level.

Long Description:
The version number displayed in the security banner (for accounts other than root) does not support the display of Patch level. The version number has a 7-character limit for display; as a result the version number shows only the 4 digits in the COE version number, separated by periods, without indication of a patch (e.g., 2.0.0.1).

INRI Number: RTO00001604

Agency Number: None.

Short Description:
The Installer does not execute from global profile's menu on a NIS client.

Long Description:
The COEInstaller does not execute from a global profile's menu on a NIS client. Note that the Installer does correctly launch from that profile's COEInstaller icon and also from the same account and profile on the NIS master. The workaround is to launch the COEInstaller from the icon instead.

INRI Number: RTO00001605

Agency Number: None.

Short Description:
The global SA_Default profile does not provide proper permissions to execute options.

Long Description:
The global SA_Default profile does not provide proper permissions to execute options (e.g., Disk Manager options such as Mount, ExportFS, Unmount, Edit Local Hosts actions, and Change Machine ID). The workaround is to create another system administrator-based profile that has all the SA_Default options and set all permissions through the Edit Profiles option. Note that no ProfilePermits file exists under /h/USERS/global/Profiles/SA_Default.

DII COE Version 3.0.1.0 Kernel Patch 1 (HP-UX 10.20) Known Problems and Errors

INRI Number: RTO00001606

Agency Number: None.

Short Description:
Profile merging should be consistent in how menu access and option permissions are granted.

Long Description:
Profile merging should be consistent in how menu access and option permissions are granted. If profile merging takes the least restrictive permissions, then the merge should take the least restrictive menu access. Sometimes profile merging results in the least restrictive permissions and the most restrictive menu access.

For example: Create and assign to an account a system administration-based profile (salocal) that does not have permissions to Change Machine ID or mount disks and does not have access to the following menu items: Close All, Segment Installer, and Set System Time. After logging into the new account and with salocal profile already selected, open the Profile Selector and select SA_Default as well. The user has access only to those menu items accessible by salocal, but has the permission from the SA_Default profile. In this case, the user has the most restrictive menu access and the least restrictive permissions. The profile merge took the menu access from the first profile (salocal) and the permissions from the second (SA_Default).

5.2 DII COE Kernel Patch 1 COTS and GOTS Known Problems and Errors

Reference the following table for a list of DII COE Version 3.0.1.0 Kernel Patch 1 COTS and GOTS (HP-UX 10.20) known problems and errors. All known problems and errors apply to DII COE Version 3.0.1.0 and are not specific to this patch. The known problems and errors are listed in order of INRI Number.

DII COE Version 3.0.1.0 Kernel Patch 1 COTS and GOTS (HP-UX 10.20) Known Problems and Errors
Total Software Changes: [10]
INRI Number: RTO00000024 **Agency Number**: None. **Short Description**: Global accounts are not supported when C2 is enabled. **Long Description**: Only local accounts are supported when C2 is enabled. Global accounts cannot be added or used if C2 is enabled. The Security Manager Remote application should be run only to add global accounts and profiles from client workstations when C2 is not enabled.
INRI Number: RTO00000033 **Agency Number**: None. **Short Description**: Security Manager Remote does not run on either the master or the client. **Long Description**: Security Manager Remote does not run on either the master or the client. The following error is received: "Failed to start security manager." JPL needs to update each Security Administrator's .rhost file.
INRI Number: RTO00000034 **Agency Number**: None. **Short Description**: The user cannot assign local groups to a global user. **Long Description**: The user cannot assign local groups to a global user. When creating a global account, the local groups are not available; however, the admin group is required in order to execute Security Administration programs. (Note that the user cannot create a new admin group either; using the Select Groups>New option, the user receives the duplicate group error message when attempting to add admin as a global group.) Local groups should be available to global accounts.

DII COE Version 3.0.1.0 Kernel Patch 1
COTS and GOTS (HP-UX 10.20) Known Problems and Errors

INRI Number: RTO00000035

Agency Number: None.

Short Description:
The Security Manager failed to detect duplicate user accounts.

Long Description:
The Security Manager failed to detect duplicate user accounts. Duplicate accounts can be added by adding the global account first and then adding the local account. If the local account is added first, the Security Manager will detect it and display the appropriate error. The Security Manager should use the same logic in both cases.

INRI Number: RTO00000036

Agency Number: None.

Short Description:
Profile Selector cannot be turned off once it is turned on.

Long Description:
The Profile Selector window appears immediately upon each login even though it is turned off in the Profile Selector Configuration window. Although profile locking was turned on at the same time that the Profile Selector was turned off, this action apparently had no effect. Evidently, the Profile Selector simply cannot be turned off once it is turned on.

INRI Number: RTO00000040

Agency Number: None.

Short Description:
When attempting to add a duplicate profile, the error message that appears is confusing.

Long Description:
When attempting to add a duplicate profile, the error message that appears is confusing. The Explanation is "Add profile error" and the Recommendation is "Call to add profile to system failed. Error Number 119." (Note that no clarifying message is available from More Details either.)

INRI Number: RTO00000041

Agency Number: None.

Short Description:
When creating an account with a duplicate name, the error message that appears is confusing.

Long Description:
When creating an account with a duplicate name, the error message that appears is confusing. The error message indicates that the system cannot assign the user to the group. The "Duplicate user name" message should appear instead.

DII COE Version 3.0.1.0 Kernel Patch 1 COTS and GOTS (HP-UX 10.20) Known Problems and Errors
INRI Number: RTO00000042 **Agency Number**:   None. **Short Description**: In the window for creating a new user account, the User Number does not increment after clicking on the Apply button. **Long Description**: In the window for creating a new user account, the User Number does not increment after clicking on the Apply button; instead, the user must manually change the number before entering a new account. The window should clear after the new account is accepted, or, at the very least, the user number should be incremented.
INRI Number: RTO00000043 **Agency Number**:   None. **Short Description**: An account error message appears when a profile window is up and that profile is deselected. **Long Description**: An account error message appears but produces no known problems when a profile window is up and that profile is then deselected. The following message appears: "Cannot read from /var/dt/appconfig/appmanager/{account name}-{hostname}-0/DII_APPS/{profile name}." Note that SSO_Default and all its icons still appear despite this message. (The user only has to "go up" in the Application Manager window and then select the desired profile folder.)
INRI Number: RTO00000070 **Agency Number**:   None. **Short Description**: Icon names often contain extensions that make them unusable. **Long Description**: Profiles created from a new account (using an SSO profile) contain icons with extensions after them if the profile was created, assigned, and then selected from within the same account group session. The workaround is to click on the Reload Actions icon and then the Reload Applications icon to be able to use the icons.

6. Release Notes

Reference the *DII COE Version 3.0.1.0 Version Description Document for the Kernel (HP-UX 10.20)* for more information about the DII COE Version 3.0.1.0 kernel.

This page intentionally left blank.